

**United States Environmental Protection Agency**  
**Region VI**  
**POLLUTION REPORT**

**Date:** Tuesday, April 26, 2005

**From:** Jhana Enders

**To:** R6 PolRep TX, Response and Prevention Branch  
Debbie Dietrich, Office of Emergency Management  
Ragan Broyles, Response and Prevention Branch

**Subject:** and Final  
Krum Mercury  
333 W. Lake Street, Krum, TX  
Latitude: 33.2586000  
Longitude: -97.2375000

<b>POLREP No.:</b>	2	<b>Site #:</b>	06ZC
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	4/13/2005	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	4/13/2005	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>	4/26/2005	<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>	4/26/2005	<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	TXN000606603	<b>Contract #</b>	
<b>RCRIS ID #:</b>			

**Site Description**

The National Response Center notified EPA (NRC Report #755445) on 11 April 2005 that a small bottle of suspected nitroglycerin had been detonated in Krum, Texas by the Denton County Bomb Squad. The material was later determined to be mercury. The detonation occurred in the parking lot of Krum City Hall. Bales of hay were stacked around the bottle to dampen the explosion. Upon realization of the identity of the contents, the City of Krum Fire Department was contacted to collect the explosion containment debris. Six hay bales were placed in plastic bags and approximately 70 pounds of mercury contaminated asphalt aggregate was collected and placed in a drum. The items were then stored in the Krum Fire Department fire engine bay.

**Current Activities**

See Pollution Report #1 and daily updates at [www.epaosc.net/krummercury](http://www.epaosc.net/krummercury) for more information.

Per decision by the Superfund Division Director, On-Scene Coordinator (OSC), Jhana Enders and the Superfund Technical Assessment and Response Team (START-2) contractor mobilized on 13 April 2005 to assess site conditions and provide air monitoring and/or other technical assistance as needed. Air monitoring was conducted with an RA-915+ Lumex Mercury Analyzer. Elevated mercury levels were detected at several areas in the parking lot. On the ground where the explosion occurred, mercury levels exceeding 100,000ng/m3 were detected. Visible mercury was also observed in the parking lot. Due to the elevated air monitoring levels in the parking lot, additional monitoring was conducted inside the City Hall building but revealed no elevated mercury levels. Due to the amount of visible mercury observed, the parking lot was secured by local police to reduce any spread of potential contamination. Air monitoring was also conducted inside the Krum Fire Station where the drum and six bagged bales of hay were being stored. No elevated levels were detected inside the Fire Station. Monitoring of the drum and bags of hay also detected elevated levels of mercury. Mercury levels of the containment debris were in excess of 65,000 - 80,000 ng/m3. The primary concern was the potential to track mercury from the parking lot to inhabited areas where vapors could pose a health threat.

The EPA worked with the City of Krum and the Texas Commission on Environmental Quality (TCEQ) to remove visible mercury/lower the mercury vapor levels in the parking lot and dispose of the explosion containment debris. The parking lot was laid out in grids of 10 foot by 10 foot squares. Although mercury was visible, due to the detonation, it had been dispersed in extremely small microbeads. In order to identify as much free mercury as possible, air monitoring was conducted with the Lumex within each grid. A Lumex reading of 10,000 ng/m3 or greater was used as a guide since no screening levels exist for mercury vapors outdoors. This number represents the EPA commercial level for indoor air. The parking

lot consisted of a hard compact layer of soil and asphalt with a top layer about one inch thick of loose aggregate. Except for the detonation area, only the loose aggregate with visible mercury was targeted for cleanup and considered to be a potential threat to track. Nine grids were identified as having visible mercury or elevated mercury levels. Elevated levels were remediated to below 10,000 ng/m3. In later discussions with the city, it was decided that they would cap the area to ensure no potential threat remained. Cleanup activities lasted from April 13 through April 26. A summary of the disposed wastes is listed below. Response activities lowered the parking lot levels from areas in excess of 100,000 ng/m3 to below 10,000 ng/m3 except in one grid, #44. See key issues for more information on this grid.

A recycling event sponsored by the TCEQ for Hazardous Household Waste was previously scheduled near the site for 04/26/05. The EPA and TCEQ worked to advertise the event in the local Krum paper and modify the event to include Mercury.

The ERRS and START personnel have demobilized from the site.

### Key Issues

Final air monitoring data for the grids remediated in the parking lot is listed under 'Documents' at [www.epaosc.net/krummercury](http://www.epaosc.net/krummercury). All grids except #44 met the cleanup goal of 10,000 ng/m3. The City of Krum intends to cap the parking lot and once this has been completed, EPA will go back with the Lumex to confirm that all grids (including #44) are below 10,000 ng/m3. The EPA does not expect to find any levels over 10,000 ng/m3 once the cap is complete.

### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	\$0.00	\$0.00	\$0.00	0.00%

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

### Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Hazardous (RQ, Hazardous Waste, solid, n.o.s. (contains debris contaminated with mercury),9,NA3077, PGIII (D009))	7 drums	029114440	Environmental Light Recyclers
Non Hazardous (Asphalt aggregate contaminated with trace mercury)	5 drums	3212651	Republic Services, Inc.

[response.epa.gov/krummercury](http://response.epa.gov/krummercury)